

### **REMARKS**

In the September 6, 2005 final Office Action, all of the elected pending claims (i.e. claims 1, 5-7, 12-17, 21, 22 and 26-36 directed to the elected embodiment *I* of Figures 1-12) stand rejected in view of prior art. Also, claim 17 was objected to for an alleged informality. Claims 8-11 and 23-25 have been withdrawn from consideration as being directed to non-elected embodiments of the present invention. Applicant respectfully requests that non-elected claims 8-11 and 23-25 be rejoined in this application upon allowance of a generic and/or linking claim or claims. No other objections or rejections were made in the Office Action.

### ***Status of Claims and Amendments***

In response to the May 31, 2005 Office Action, Applicant has amended the claims as indicated above. Specifically, only claim 17 is currently being amended by the current amendment, in order to correct the alleged informality in this claim. Thus, claims 1, 5-17 and 21-36 are pending, with claims 1, 16 and 17 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

### ***Claim Objections***

In paragraph 1 of the Office Action, claim 17 was objected to because this claim should allegedly include an additional colon (:) for clarity. In response, Applicant has amended claim 17 to include an additional colon (:) as suggested in the Office Action. However, Applicant disagrees with the position of the Office Action with respect to this objection. Applicant believes that it is more appropriate for a claim to include only one colon (:) therein, as was the case in claim 17 prior to the current Amendment. In any case, withdrawal of this objection is respectfully requested in view of the amendment to claim 17.

### ***Rejections - 35 U.S.C. § 103***

In paragraphs 2-6 (pages 2-5) of the Office Action, claims 1, 5-7, 12-17, 21, 22 and 26-36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,583,787 to Michelotti alone (claims 1, 5, 12-16 and 34-36), Michelotti in combination with

U.S. Patent No. 6,216,344 to Mercat et al. (claims 6-7), Michelotti and Mercat et al. in further view of U.S. Patent No. 219,500 to Munson (claims 17, 21, 22, 26-29 and 31-33), or Michelotti, Mercat et al. and Munson in further view of U.S. Patent No. 4,626,036 to Hinsberg et al. (claim 30). In response, Applicant respectfully traverses these rejections and requests reconsideration of these rejections, as explained below.

**Rejections Fail to Establish *Prima Facie* Case of Obviousness**

In the Office Action, the rejections apparently rely on “common knowledge” to support a conclusion of obviousness of the claims. Applicant respectfully traverses this reliance and asserts that rejections fail to establish *prima facie* case of obviousness. In particular, first, it is asserted in the Office Action when referring to the Michelotti patent that

heat fusing techniques (such as welding and brazing) provide a more secure and permanent connection means between one or more elements than riveting techniques.

Second, it is asserted in the Office Action when referring to the Michelotti patent that

this riveting (at the outer portion of the rim) would be a duplication of parts. Heat fusing of the spoke attachment portions to the rim portions, as opposed to riveting them, would seal both ends of the spoke attachment portions, thus sealing the rim from contaminants such as water and debris; thus reducing corrosion and/or damage to the rim. Therefore, one of ordinary skill would find heat fusing the spoke attachment portions to the rim an obvious and more beneficial substitution with riveting.

Applicant respectfully traverses these statements and the apparent reliance on “common knowledge” to support these statements. As clearly set forth in MPEP 2144.03, rejections relying on “common knowledge” only should be judiciously applied in limited circumstances. This is *not* one of those limited circumstances. Not a single piece of documentary evidence has been provided in the Office Action to support the above mentioned statements. In fact, heat fusing (such as welding and brazing) is not “an obvious and more beneficial substitution with riveting” when applied to rims. In fact, heat fusing can have certain drawbacks and may not work as well in every situation as a rivet.

Heat fusing (such as welding and brazing) is not equivalent to riveting in the spoke attachment portions of the claims. Riveting may be equivalent to spot welding in some

circumstances, e.g., where each rivet is replaced by a single spot weld. However, in the case at hand, the Michelotti patent does not use individual rivets to attach the "bush 4" to the rim, but rather deforms the "bush 4" itself against the rim. This type of connection in a bicycle rim is not equivalent to heat fusing (such as welding and brazing). Moreover, heat fusing (such as welding and brazing) is *not per se* a more secure and permanent connection means than riveting. A riveted connection can be as secure and as permanent as heat fusing (such as welding and brazing).

It is not appropriate to rely on "common knowledge" in the art without evidentiary support in the record in the case at hand. Accordingly, Applicant respectfully requests that documentary evidence be provided to support the above mentioned statements. See MPEP 2144.03 C.

Independent claims 16 and 17

Independent claims 16 and 17 require, inter alia, a plurality of first tubular spoke attachment portions *heat fused* to the outer annular portion of the rim and a plurality of second tubular spoke attachment portions *heat fused* to the inner annular portion of the rim. In other words, claims 16 and 17 require first and second tubular spoke attachment portions, which are *both* heat fused to the outer and inner annular portions, respectively. This arrangements are not disclosed or suggested in the Michelotti patent or any other prior art of record. Moreover, Applicants believe there is no suggestion or motivation to modify the rim of the Michelotti patent to result in such an arrangement as asserted in the Office Action.

The Office Action admits that the Michelotti patent does not show such a heat fused arrangement (i.e. where outer and inner tubular spoke attachment portions are heat fused to the rim). However, the Office Action indicates that the Michelotti patent discloses the tubular spoke attachment portions being riveted to the *corresponding* portions of the rim, and that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize heat fusing as an equivalent fastening means in order to form a permanent connection between the bushing and the rim, thus reinforcing the rim while eliminating friction or relative movement between the bushing and the rim (which would reduce wear on both the bushing and the rim). Applicant respectfully disagrees with this assertion.

The Michelotti patent *does not* disclose that "the tubular spoke attachment portions are riveted to the *corresponding* portions of the rim" as suggested in the Office Action.

Rather, the Michelotti patent only discloses "**The bushes are apt to be riveted onto the inner element of the rim,...**" See lines 8-9 of the Abstract. Also, the Michelotti patent only indicates that the projecting part of the cylindrical (inner) body 7 is riveted against the rim element 2. See column 6, lines 9-16 of the Michelotti patent where attachment to the rim is discussed. In other words, the Michelotti patent does not use individual rivets to attach the "bush 4" to the rim, but rather deforms the inner end of the "bush 4" itself against the rim. This type of connection in a bicycle rim is not equivalent to heat fusing (such as welding and brazing). Thus, even if the so-called riveting taught by Michelotti was replaced with heat fusing as suggested in the Office Action, *only the inner tubular bodies 7 of the bushes 4 would be heat fused to the inner rim element 2*. In other words, the Michelotti patent does not teach or suggest riveting of the *outer* tubular bodies 5 to the *outer* rim element 1. Accordingly, if the rim of Michelotti were modified to utilize heat fusing instead of riveting, *both* the inner and outer tubular members *would not be heat fused* to the outer and inner annular portions of the rim as asserted in the Office Action. Also, there is no suggestion or motivation to include an additional riveted and/or heat fused outer connection. In other words, any hypothetical rim suggested by the Michelotti patent, at best, would utilize heat fusing instead of riveting at the *inner* connection only. Thus, any such hypothetical rim would not result in all of the limitations of independent claims 16 and 17.

Furthermore, replacing the so-called riveting of the Michelotti patent with heat fusing as suggested in the Office Action would destroy the rim of for its intended purpose. The deforming of the inner end of the bush in the Michelotti patent is also utilized to form the appropriately oriented seat (jointing element 9) for supporting the spoke nipples which varies around the rim depending on the desired inclination of the spokes. Using heat fusing instead of riveting would eliminate this deforming of the jointing elements 9, and thus, the spokes would not be oriented properly. Accordingly, Applicant believes there is no suggestion or motivation to further modify the connections of the Michelotti patent to utilize heat fusing instead of the so-called riveting.

The remaining references relied on in these rejections do not provide for the deficiencies of the Michelotti patent with respect to claims 16 and 17. Accordingly withdrawal of the rejections of claims 16 and 17 are respectfully requested.

It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious, unless the prior art *suggests* the desirability of the modification. The prior art of record lacks any suggestion or expectation of success for combining/modifying the above patents to create the Applicant's unique arrangement of the plurality of outer and inner (first and second) tubular spoke attachment portions heat fused to the outer and inner annular portions, respectively.

Dependent claims 5-7, 12-15, 21, 22 and 26-36

Dependent claims 5-7, 12-15, 21, 22 and 26-36 are believed to be allowable for the reasons discussed above with respect to independent claims 16 and 17, from which they depend. Dependent claims 5-7, 12-15, 21, 22 and 26-36 are further allowable because they include additional limitations.

For example, claims 32 and 35 require all of the first tubular spoke attachment portions are identical to each other and all of the second tubular spoke attachment portions are identical to each other. This arrangement is not disclosed in the Michelotti patent. Rather, in the Michelotti patent, the outer tubular bodies 5 and the inner tubular bodies 7 are provided in at least two different configurations in order to accommodate the spoking arrangement of the wheel. See column 6, lines 2-9. Modifying the bushes of the Michelotti patent to make them all identical would require a complete reconstruction of the rim of the Michelotti patent, abandoning the teaches of Michelotti..

Applicant believes that since the prior art of record does not disclose or suggest the invention as set forth in independent claims 16 and 17, the prior art of record also fails to disclose or suggest the inventions set forth in dependent claims 5-7, 12-15, 21, 22 and 26-36. Moreover, dependent claims 5-7, 12-15, 21, 22 and 26-36 are further allowable because they include additional limitations, which in combination with claims 16 or 17 are not disclosed or suggested in the prior art.

Independent claim 1

Independent claim 1 is believed to be allowable for the same reasons as discussed above with respect to independent claims 16 and 17. Independent claim 1 does not require a *plurality* of first tubular spoke attachment portion or a *plurality* of second tubular spoke attachment portions. However, claim 1 does require first and second tubular spoke attachment portions heat fused to the rim and defining a spoke receiving space with an



internal surface configured and dimensioned to secure an end of a spoke within said spoke receiving space, at least one of said first and second tubular spoke attachment portions having a rim abutment surface that contacts a radially facing surface of the rim to limit radial movement relative to the rim. Even if the rim of Michelotti were modified to utilize heat fusing instead of riveting, *both* the *inner* and *outer* tubular members *would not be heat fused* to the outer and inner annular portions of the rim, as explained above. Accordingly, withdrawal of the rejection of this claim is respectfully requested.

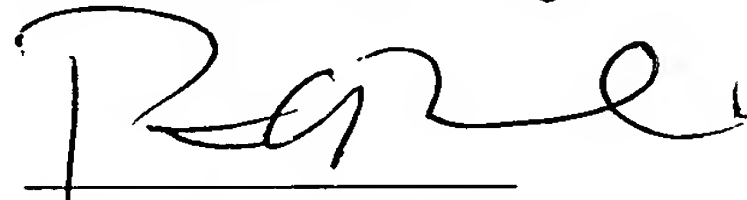
### ***Response to Arguments***

In paragraph 7 of the Office Action, the Office Action indicates that the arguments of the June 23, 2005 Amendment have been fully considered but are not persuasive. The Office indicates that while Michelotti does not specify that the first (outer) spoke attachment portion is riveted to the outer portion of the rim, one of ordinary skill in the art would have found it obvious to do so, in order to prevent relative movement between spoke attachment portions. The Office Action asserts that this would reduce wear on the parts. Furthermore the Office Action asserts that this riveting would be a duplication of parts, and that heat fusing the spoke attachment portions to the rim portions as opposed to riveting them would seal both ends of the spoke attachment portion, thus sealing the rim from contaminants such as water and debris; thus reducing corrosion and/or damage to the rim. Therefore, the Office Action asserts, one of ordinary skill in the art would find heat fusing the spoke attachment portions to the rim an obvious and more beneficial substitution with riveting. Applicant respectfully disagrees. Not a single piece of documentary evidence has been provided in the Office Action to support the above mentioned statements. In fact, heat fusing (such as welding and brazing) is not “an obvious and more beneficial substitution with riveting” when applied to rims. In fact, heat fusing can have certain drawbacks and may not work as well in every situation as a rivet.

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In view of the foregoing amendment and comments, Applicant respectfully asserts that claims 1, 5-17 and 21-36 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. If there are any questions regarding this amendment, please feel free to contact the undersigned.

Respectfully submitted,



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